Submission to the AEMC: A Coherent Framework for the Gas Network Transition

Executive Summary

Australian gas networks are shifting from expansion to managed decline. The ACT and Victoria are leading this transition, offering essential lessons for national reform. Policy clarity, as demonstrated by Victoria's Gas Substitution Roadmap and the ACT's Integrated Energy Plan, drives decisive change. However, the scale and complexity of managing decline in gas-dependent states necessitate more than incremental reform.

The AEMC's proposed rule changes are foundational. Nevertheless, their effectiveness is contingent on a coherent, three-level framework that integrates microeconomic price signals, proactive network planning, and clear strategic governance. Without this integration, Australia risks inefficient investment, inequitable cost allocation, and unsafe outcomes as customers disconnect and networks contract.

The managed decline of gas networks must be coordinated with timely electricity network augmentation. This is essential to maintain supply security while simultaneously minimising total energy system costs. This whole-of-system perspective is essential to avoid both stranded gas assets and inefficient electricity infrastructure investment.

Four principles must guide this transition: **Equity, Efficiency, Safety, and Strategic Order**. Equity demands fair cost-sharing. Regulated gas networks earned \$1.8 billion in supernormal profits between 2014 and 2022, yet low-income households now face stranded customer risks. Efficiency requires ending subsidies for new connections, minimising disconnection costs, and considering total energy system costs, including avoided gas network costs offset against necessary electricity network investments. Safety demands that economic regulation not incentivise households to abandon live service lines. Strategic order requires government-led planning to coordinate decommissioning and prevent reactive, system-level failures.

Recommendations

Success requires simultaneous reform at three levels:

Level 1: Correct Microeconomic Price Structures (NGR Reform)

The Commission must reform the National Gas Rules (NGR) to establish pricing structures that send clear, efficient, and equitable price signals for entering and exiting the gas networks.

Recommendation 1: Finalise the rule to implement full, upfront, cost-reflective connection charges, aligning with the AEMC's Draft Determination on GRC0085. This is critical to stop stranded asset growth.

Recommendation 2: Establish a risk-based, cost-efficient disconnection framework, consistent with Victorian and ACT safety evidence. This framework should prioritise minimising total system cost of safe disconnections before allocating costs.

Level 2: Proactive Network Planning (NGR Reform)

Microeconomic rules must be informed by transparent, long-term planning to ensure regulatory decisions are prudent and aligned with managed decline.

Recommendation 3: Mandate Gas Distribution System Transition Plans (GTPs) as part of the NGR framework. These plans are essential to provide transparent, forward-looking evidence for all regulatory decisions on network expenditure, depreciation, and decommissioning. GTPs should be informed by AEMO's national-level demand forecasting, system security analysis, and integrated energy scenario planning. This would ensure consistency and technical rigor.

Level 3: Strategic Governance (State Government Action)

NGR reforms can only function effectively within a clear strategic context set by governments.

Recommendation 4: The AEMC should formally recognise and endorse the need for state governments to establish Gas Transition Authorities (GTAs) or equivalent bodies. As the ACT Government demonstrates, a GTA provides essential strategic direction that enables effective network planning (the GTP) and allows economic regulation (by the AER) to be applied coherently and effectively. Critically, GTAs must coordinate gas network decommissioning with electricity network augmentation planning to ensure supply security and minimise total energy system costs.

The Three-Level Framework

This integrated approach ensures that:

- Governments set policy direction (through GTAs) and coordinate gas decommissioning with electricity network planning
- Networks prepare GTPs aligned with government direction and informed by AEMO analysis
- AER uses GTPs as the authoritative evidence base to test prudence and depreciation schedules
- AEMC establishes the NGR framework that enables efficient price structures at the customer level

By adopting this framework, the AEMC can ensure that Australia's gas network decline is **planned**, **affordable**, **and fair for all consumers**, while maintaining energy system reliability through coordinated electricity network investment.

Section 1: Introduction

The Victorian Energy Future Network (VEFN) welcomes the opportunity to respond to the AEMC's Consultation Paper, Gas Networks in Transition (GRC0082). We commend the Commission for addressing the structural challenges facing Australia's gas distribution networks as jurisdictions move toward net-zero emissions and consumers rapidly electrify.

Australian gas networks are shifting from a period of expansion to one of managed decline, most visibly in the ACT and Victoria, the nation's largest residential gas market. Victoria's Gas Substitution Roadmap, established in 2022 and updated annually, sets a clear course to reduce reliance on fossil gas and improve household energy efficiency. It accelerates electrification as homes replace gas appliances and new developments adopt all-electric designs. Evoenergy, the ACT's gas distributor, now forecasts a 28 percent decrease in its gas network connections, representing over 55,000 disconnections, and a 24 percent decrease in gas consumption over the next five-year regulatory period alone.

The ACT experience validates the proposed three-layered model and provides a powerful blueprint for other jurisdictions. It demonstrates how to ensure the transition is managed rather than chaotic, protecting the long-term interests of all consumers. Victoria's early efforts reveal the scale and complexity of managing the transition in a large, gas-dependent state. Together, they provide the evidence for reform.

This submission uses lessons from both the ACT and Victoria to propose a coherent framework. The AEMC's proposed rule changes are foundational, but their effectiveness depends on broader strategic context. While incremental, customer-level reforms are necessary, they are not enough alone.

Section 2: Guiding Principles

Reforms to the NGR must protect consumers and maintain public confidence. The Victorian experience shows that the social and economic implications of a declining gas network are far-reaching.

Four principles should guide the transition: **Equity, Efficiency, Safety, and Strategic Order.**

Equity

Transition costs must be shared fairly. In Victoria, more than 80% of homes are connected to gas, which is far higher than any other jurisdiction. Low-income renters, apartment dwellers, and some regional households are least able to electrify, leaving them at risk of higher, escalating network tariffs as others disconnect.

Meanwhile, regulated gas networks have already earned significant returns. As national analysis by IEEFA shows, gas network operators earned \$1.8 billion in supernormal profits between 2014 and 2022. Given these past gains, shareholders should share equitably in the costs of the policy-driven transition. Reliance on remaining gas consumers to cover transition costs means those least able to change will bear a higher cost burden.

Efficiency

Transition must occur at the lowest total system cost and the NGR can assist by establishing structures that send clear, efficient, and equitable price signals for entering and exiting the gas networks. The current framework socialises new connection costs across existing customers, encouraging stranded asset growth.

Efficiency also demands minimising underlying operational costs during transition. The disconnection debate must first focus on minimising the cost of safe permanent disconnection before addressing allocation.

Critically, efficiency requires considering total energy system costs, not just gas network costs in isolation. This includes recognising avoided gas network costs offset against necessary electricity network investments. Premature or oversized electricity infrastructure investments can be as wasteful as maintaining uneconomic gas assets. Strategic coordination between gas decommissioning and electricity augmentation is essential to minimise total system costs while maintaining supply security.

Safety

Economic regulation cannot incentivise unsafe outcomes. Rising disconnection fees risk prompting households to abandon live service lines. As Evoenergy's ACT submission demonstrates, technical and safety aspects are complex and rightly governed by jurisdictional safety bodies. The NGR must ensure safe and efficient outcomes.

Strategic Order

Reactive, customer-by-customer rule changes cannot manage system-level transformation. Transition requires proactive, strategic, coordinated planning. The risk is real: Solstice Energy recently ceased gas supply to ten regional Victorian towns, citing financial non-viability⁷.

The ACT's planned transition demonstrates the benefits of clear government-led direction. Victoria's Gas Substitution Roadmap and the AER's demand forecasting review provide a foundation for strategic order. These efforts should evolve into formal Gas Distribution System Transition Plans (GTPs) under clear governance. Orderly transition requires mandatory GTPs overseen by jurisdictional strategic governance.

Section 3: Reforming Connection Charges

The first step is to stop adding to the problem. The current Net Present Value (NPV) method for connection charges, developed for a growing market, forces existing customers to subsidise new connections. Full, upfront, cost-reflective charges based on "beneficiary pays" principles for new gas connections should be implemented immediately. (Victoria implemented this change on 1 January 2025.) This logical, prudent reform has clear regulatory consensus and establishes the necessary precedent for managing the existing asset base.

Support extends beyond consumer advocates. Evoenergy, despite forecasting very few new connections, supports upfront connection charges in principle. This demonstrates the reform is prudent for any network facing decline.

Claims that such charges would constitute a "de-facto ban" on new connections or hinder renewable gas prospects are misplaced. It is more prudent to stop current investment inefficiencies than to subsidise speculative future technologies. The prudent course is to address immediate, inefficient subsidies. Every additional new connection deepens the financial and equity risks of future decommissioning.

This reform establishes a foundational principle: stranded asset growth must stop. This creates momentum to address the larger challenge of managing existing asset risk. Once it is accepted that existing customers should not pay for new connections, it becomes harder to argue they should bear the full cost of writing down the entire network.

Section 4: A Pragmatic Framework for Disconnections

Disconnection policy remains underdeveloped. The debate should move from who pays to how to minimise the cost of a safe disconnection.

Evoenergy's ACT experience shows that full physical disconnection for every consumer is neither necessary nor cost-effective. They found that permanently disconnecting all non-consuming customers is disproportionate to risk and fails the 'As Low As Reasonably Practicable' (ALARP) test. In most cases, a temporary meter-level disconnection is safe and sufficient until full decommissioning occurs.

Victoria's networks face the same challenge but demand a disconnection process costing over \$1,000, which is then paid by the remaining customers. Applying a **risk-based approach like the ACT**, where temporary meter disconnection is treated as sufficient except in specific high-risk cases (e.g. demolitions, property transfers, or safety breaches), would deliver major cost savings and maintain safety.

Such an approach aligns with Energy Safe Victoria's regulatory framework, which already emphasises proportionality and risk-based management.

VEFN therefore proposes a Targeted Permanent Disconnection framework that:

- Requires full (permanent) disconnection only in high-risk situations, such as property demolition or sale after full electrification.
- Treats temporary meter disconnection as a safe, functional default. Appropriate signage may help to reduce risk.
- Defers large-scale abolishments until they can be coordinated efficiently at the street or suburb level.

This model minimises near-term costs while maintaining safety. It also allows a constructive response to the JEC's proposals:

Issue	JEC Proposal	Evidence-Based Position
Minimum safety standard	Define "minimum make-safe" via NGR	Support the principle; however standards belong to safety regulators, not the NGR.
Meter removal	Optional "remediation" service	Must remain integral to permanent disconnection for clarity and safety.
Home pipeline asset ownership transfer	Transfer to property owners	Oppose; creates legal and safety risks.
Contestability	Allow accredited third-party disconnections	Support in principle, subject to strict safety accreditation.

Section 5: Capital Recovery and Expenditure

The concept of "prudence" in capital expenditure must evolve for a market in structural decline. It is no longer prudent to replace or extend long-life assets when government policy and consumer behaviour indicate that parts of the gas network will be decommissioned well before those assets reach the end of their technical life. The Victorian Government's *Gas Substitution Roadmap* and the ACT's legislated transition timetable provide clear structures but there is a clear role for the AEMC to set aligned rules to deliver low cost energy solutions.

The principle of **fairness** must also guide how transition costs are shared. Large portions of the regulated asset base (RAB) are now likely to become **stranded assets**, that is, infrastructure that can no longer earn an economic return as customers disconnect and networks are decommissioned. Recognising and writing down these stranded assets is unavoidable. The question is how those losses are allocated between shareholders and consumers.

Over the past decade, gas networks have enjoyed generous risk-adjusted returns. Analysis by the Institute for Energy Economics and Financial Analysis (IEEFA) shows that between 2014 and 2022, regulated gas networks earned around \$1.8 billion in supernormal profits. This was well above their approved return allowance. These gains resulted from consistent demand over-forecasting and flawed financing assumptions. The assumptions presumed only partially reduced risk under regulation, not the near-total risk elimination that networks effectively enjoyed. In other words, consumers have already paid for risks that did not materialise.

This history demonstrates a systemic incentive problem. In the past, networks had incentive to under-forecast demand to maximise revenue under the price cap. Now, facing decline, networks have incentive to over-forecast potential for renewable gases to justify ongoing capital expenditure and delay decommissioning. These are two sides of the same coin: a systemic incentive to produce forecasts benefiting the network's financial position rather than reflecting the most likely market outcome.

Now that demand is falling and parts of the asset base must be written off, fairness demands that this historical asymmetry be corrected. **Accelerated depreciation** or other recovery mechanisms **must therefore be conditional**: allowed only where consumer protections are in place and where shareholders make a commensurate contribution to absorbing write-down costs. Otherwise such requests are asking to privatise historical profits while socialising future losses onto a shrinking and increasingly vulnerable customer base.

This is not a punitive position. It is a balanced application of the original **regulatory compact**, under which investors are entitled to recover prudent and efficient costs but not guaranteed perpetual revenue regardless of market change. Fairness, in this context, means recognising both the **over-recovery of the past** and the **shared responsibility for managing the transition ahead.**

Section 6: The Imperative of Strategic Planning and Governance

The proposed NGR reforms on connections, disconnections, and expenditure can only succeed within a clear strategic context. Without overarching planning, regulators are forced to make five-year decisions amid uncertainty about state policy directions.

VEFN supports the introduction of mandatory Gas Distribution System Transition Plans (GTPs), coordinated by state-based Gas Transition Authorities (GTAs) or equivalent bodies. In Victoria, this could build on the Department of Energy, Environment and Climate Action's existing role, ensuring coordination between state policy, safety regulation, and AER oversight.

These GTPs would provide the strategic link between state energy policy and national economic regulation:

• Governments set policy direction through GTAs or equivalent bodies.

- GTAs coordinate integrated infrastructure planning, including:
 - Gas network decommissioning timelines and priorities
 - Electricity network augmentation requirements to support electrification
 - Timing and sequencing to maintain supply security while minimising total system costs
 - Prevention of both stranded gas assets and premature/oversized electricity investments
- AEMO provides independent national-level demand forecasting, system security
 analysis, and integrated energy scenario planning through the Integrated System Plan
 and gas market equivalents. This ensures GTPs are developed with consistent,
 high-quality technical foundations and alignment with broader National Electricity
 Market planning.
- Networks prepare GTPs aligned with government direction and informed by AEMO analysis.
- AER uses GTPs as the authoritative evidence base to test prudence and depreciation schedules.

This governance model, demonstrated in practice by the ACT Government's Integrated Energy Plan, eliminates conflicting assumptions and allows transparent, efficient decision-making.

The ACT's approach shows how strategic coordination between gas decommissioning and electricity planning prevents both energy security risks and inefficient infrastructure investment. Other jurisdictions should now follow suit.

In contrast, networks in other jurisdictions are forced to plan for multiple, contradictory futures. They simultaneously propose expenditure for full-scale conversion to renewable gas while seeking accelerated depreciation to mitigate electrification-driven asset stranding. This leads to inefficient investment, regulatory uncertainty, and delays action on the inevitable transition. The lack of clear strategic direction from governments creates a planning vacuum, forcing the economic regulator to make decisions with an incomplete and uncertain evidence base.

The absence of coordinated electricity network planning compounds this problem. Without strategic oversight, gas disconnections may outpace electricity network capacity in some areas, creating supply security risks. Conversely, electricity networks may overinvest in anticipation of demand that materialises more slowly than forecast. The GTA model prevents both outcomes by providing the strategic coordination point for integrated energy infrastructure planning.

The AEMC's economic rules can only function effectively within a clear strategic framework. The Commission should formally endorse the need for state-led GTAs and mandatory GTPs as essential enabling conditions for the NGR reforms to work as intended.

Section 7: Conclusion

The AEMC has correctly identified that the regulatory framework for gas networks is no longer fit for purpose in an era of declining demand. The rule change proposals from ECA and JEC provide a robust set of microeconomic reforms. However, to ensure orderly, efficient, and equitable decline for all Australians, these rule changes must be integrated into the coherent three-level framework set out in this submission.

Victoria's gas transition is already under way, and its lessons are clear: policy clarity accelerates change, consumers need protection from stranded costs, and coordination between governments, regulators, and networks is essential. The transition must also coordinate gas decommissioning with electricity network augmentation to maintain supply security while minimising total energy system costs. The ACT shows what can be achieved through clear intent; Victoria shows the scale of what's at stake. Together they offer a roadmap for the nation.

The recommendations in this submission provide that roadmap. By implementing full cost-reflective connection charges, establishing risk-based disconnection frameworks, mandating Gas Distribution System Transition Plans informed by AEMO analysis, and endorsing the need for state-led Gas Transition Authorities that coordinate gas and electricity infrastructure planning, the AEMC can ensure that Australia's gas network decline is planned, affordable, and fair for all consumers.



About Victorian Energy Future Network

www.vefn.au

VEFN is a network of volunteer experts helping policymakers plan the gradual shutdown of gas distribution systems in Victoria, with lessons that could inform Australia's broader energy transition. Our team develops expert policy advice for the government to accelerate Victoria's transition to a clean energy future.

We focus on creating a policy landscape that enables all Victorians to eventually live in healthier, safer, and more comfortable all-electric homes.

Works Cited

(Other than those on the <u>AEMC consultation page</u> at 23 October 2025)

- 1. Victoria's Gas Endgame Victorian Energy Future Network, retrieved 23 October 2025 from:
 - https://www.parliament.vic.gov.au/4a9674/contentassets/8d5ce9513d464d64a678a6 63631521dc/submission-documents/035.-victorian-energy-future-network redacted. pdf
- 2. The Integrated Energy Plan ACT, retrieved 23 October 2025 from: https://www.climatechoices.act.gov.au/energy/canberras-electrification-pathway
- 3. Victoria's Gas Substitution Roadmap VIC, retrieved 23 October 2025 from: https://www.energy.vic.gov.au/renewable-energy/victorias-gas-substitution-roadmap
- 4. Energy Safe Victoria Strategy 2025 2028, retrieved 2025-10-23 from: https://www.energysafe.vic.gov.au/sites/default/files/2025-09/Energy-Safe-Victoria-Strategy-2025-28.pdf
- 5. Gas Distribution System Code of Practice, Essential Services Commission, retrieved 23 October 2025 from:
 - https://www.esc.vic.gov.au/sites/default/files/documents/FDP%20-%20Gas%20Distribution%20Code%20of%20Practice%20review%20-%20FINAL.pdf
- 6. Gas networks are making persistent and significant supernormal profits, IEEFA, retrieved 23 October 2025 from:
 - https://ieefa.org/sites/default/files/2024-06/Gas%20networks%20are%20making%20persistent%20and%20significant%20supernormal%20profits May24.pdf
- 7. Dairy News Australia (2025) "Left in the Dark" retrieved 23 October 2025 from: https://www.dairynewsaustralia.com.au/news/left-in-the-dark-3